

Title (en)
LUBRICATING OIL COMPOSITION

Publication
EP 0407977 B1 19930428 (EN)

Application
EP 90113167 A 19900710

Priority
JP 17893789 A 19890713

Abstract (en)
[origin: EP0407977A1] A lubricating oil composition comprising a major amount of at least one lubricating base oil, from 0.05 to 5 % by weight of at least one zinc dithiophosphate, and from 0.01 to 10 % by weight of at least one unsaturated aliphatic alcohol of from 16 to 24 carbon atoms, the weight ratio of the unsaturated aliphatic alcohol to the zinc dithiophosphate being from 0.1 to 10, has excellent thermostability and oxidation stability and has excellent effect in improving load carrying capacity and wear resistance.

IPC 1-7
C10M 141/10; C10N 10/04; C10N 40/00; C10N 40/02; C10N 40/04; C10N 40/08; C10N 40/25

IPC 8 full level
C10M 141/10 (2006.01); **C10M 163/00** (2006.01); **C10M 167/00** (2006.01); **C10N 10/04** (2006.01); **C10N 30/06** (2006.01); **C10N 30/08** (2006.01);
C10N 30/10 (2006.01); **C10N 40/02** (2006.01); **C10N 40/04** (2006.01); **C10N 40/08** (2006.01); **C10N 40/25** (2006.01)

CPC (source: EP KR)
C10M 107/04 (2013.01 - EP); **C10M 129/06** (2013.01 - EP); **C10M 137/02** (2013.01 - EP); **C10M 137/04** (2013.01 - EP);
C10M 137/08 (2013.01 - EP); **C10M 137/10** (2013.01 - EP); **C10M 141/00** (2013.01 - KR); **C10M 141/10** (2013.01 - EP);
C10M 145/14 (2013.01 - EP); **C10M 155/02** (2013.01 - EP); **C10M 159/22** (2013.01 - EP); **C10M 159/24** (2013.01 - EP);
C10M 163/00 (2013.01 - EP); **C10M 167/00** (2013.01 - EP); **C10M 2203/02** (2013.01 - EP); **C10M 2203/022** (2013.01 - EP);
C10M 2203/024 (2013.01 - EP); **C10M 2203/04** (2013.01 - EP); **C10M 2205/0225** (2013.01 - EP); **C10M 2207/021** (2013.01 - EP);
C10M 2207/028 (2013.01 - EP); **C10M 2207/262** (2013.01 - EP); **C10M 2207/281** (2013.01 - EP); **C10M 2207/282** (2013.01 - EP);
C10M 2207/283 (2013.01 - EP); **C10M 2207/286** (2013.01 - EP); **C10M 2207/289** (2013.01 - EP); **C10M 2207/34** (2013.01 - EP);
C10M 2209/084 (2013.01 - EP); **C10M 2215/04** (2013.01 - EP); **C10M 2215/086** (2013.01 - EP); **C10M 2215/26** (2013.01 - EP);
C10M 2215/28 (2013.01 - EP); **C10M 2217/046** (2013.01 - EP); **C10M 2217/06** (2013.01 - EP); **C10M 2219/046** (2013.01 - EP);
C10M 2219/089 (2013.01 - EP); **C10M 2223/02** (2013.01 - EP); **C10M 2223/04** (2013.01 - EP); **C10M 2223/041** (2013.01 - EP);
C10M 2223/042 (2013.01 - EP); **C10M 2223/043** (2013.01 - EP); **C10M 2223/045** (2013.01 - EP); **C10M 2223/049** (2013.01 - EP);
C10M 2223/065 (2013.01 - EP); **C10M 2223/10** (2013.01 - EP); **C10M 2229/02** (2013.01 - EP); **C10M 2229/04** (2013.01 - EP);
C10M 2229/041 (2013.01 - EP); **C10M 2229/042** (2013.01 - EP); **C10M 2229/043** (2013.01 - EP); **C10M 2229/044** (2013.01 - EP);
C10M 2229/045 (2013.01 - EP); **C10M 2229/046** (2013.01 - EP); **C10M 2229/047** (2013.01 - EP); **C10M 2229/048** (2013.01 - EP);
C10M 2229/05 (2013.01 - EP); **C10M 2229/051** (2013.01 - EP); **C10M 2229/052** (2013.01 - EP); **C10M 2229/053** (2013.01 - EP);
C10M 2229/054 (2013.01 - EP); **C10N 2010/04** (2013.01 - EP); **C10N 2040/02** (2013.01 - EP); **C10N 2040/08** (2013.01 - EP);
C10N 2040/25 (2013.01 - EP); **C10N 2040/251** (2020.05 - EP); **C10N 2040/255** (2020.05 - EP); **C10N 2040/28** (2013.01 - EP)

Cited by
US7146956B2; US5607907A; EP3940045A4

Designated contracting state (EPC)
BE CH DE FR GB IT NL SE

DOCDB simple family (publication)
EP 0407977 A1 19910116; EP 0407977 B1 19930428; DE 69001462 D1 19930603; DE 69001462 T2 19931104; JP 2795911 B2 19980910;
JP H0345697 A 19910227; KR 910003081 A 19910226; KR 930010530 B1 19931025

DOCDB simple family (application)
EP 90113167 A 19900710; DE 69001462 T 19900710; JP 17893789 A 19890713; KR 900010669 A 19900713